

## 1.3

# Current Federal Regulations

A set of Federal laws, Executive Orders, and Executive Memoranda direct Federal Government facility managers to reduce the energy and environmental impacts of the buildings they manage. These laws and regulations require facility managers to be proactive in their efforts to reduce resource consumption, to reuse and recycle materials, and to dramatically reduce the impacts of Federal Government activities on the environment. **Laws** are the will of the American people expressed through their elected representatives. **Executive Orders** are the President's directives to the agencies. **Regulations** establish procedures and criteria by which decisions shall be made and actions carried out. Laws, Executive Orders, and Regulations all provide a facility manager with the foundation, justification, and mandate to conduct projects designed to improve the energy and environmental performance of their facilities. In this section, the major Federal laws, Executive Orders, and regulations governing energy and environmental actions, together with their important provisions, are listed in reverse chronological order.

## Federal Laws

**Energy Policy Act of 1992 (EPACT).** By amending the National Energy Conservation Policy Act (NECPA), this Act increased conservation and energy-efficiency requirements for the government and consumers. Specifically, it required Federal agencies to reduce per-square-foot energy consumption 20% by 2000 compared to a 1985 baseline; it provided authorization for DOE to issue rules and guidance on Energy Savings Performance Contracts (ESPCs) for Federal agencies; it authorized agencies to participate in utility incentive programs; it required Federal agencies to train and utilize energy managers; it directed the Office of Management and Budget to issue guidelines for accurate assessment of energy consumption by Federal buildings; and it directed GSA to report annually on estimated energy costs for leased space.

**Federal Energy Management Improvement Act (FEMIA) of 1988.** By amending NECPA, this Act mandated a 10% reduction in per-square-foot energy use by Federal buildings between 1985 and 1995, marking the first time that Congress specified the level of savings that had to be achieved.

**Comprehensive Omnibus Budget Reconciliation Act (COBRA) of 1985.** COBRA, a one-year funding bill, provided Federal agencies with an alternative source of funding for energy-efficiency investments. For the first time, agencies were encouraged to seek private financing and implementation of energy-efficiency projects through "shared energy savings" (SES) contracts.

**National Energy Conservation Policy Act (NECPA) of 1978.** NECPA specified the use of a life-cycle costing methodology as the basis for energy procurement policy and specified the rate for retrofit of Federal buildings with cost-effective energy measures. Title V of NECPA was codified as the *Federal Energy Initiative*.

**Resource Conservation and Recovery Act (RCRA) of 1976.** RCRA 6002 established a Federal mandate to "Buy Recycled." RCRA 1008 and 6004 require all Federal agencies generating solid waste to take action to recover it.

**Energy Policy and Conservation Act (EPCA) of 1975.** EPCA was the first major piece of legislation to address Federal energy management. This law directed the President to develop a comprehensive energy management plan. EPCA has largely been superseded by later legislation.

## Executive Orders

**Executive Order 13149,** "Greening the Government through Federal Fleet and Transportation Efficiency," April 21, 2000. This order requires Federal agencies to reduce petroleum use 20% by 2005 compared with 1999 levels. Agencies can accomplish these reductions through the use of more fuel-efficient vehicles, use of alternative-fuel vehicles, reducing vehicle miles traveled, increasing vehicle load factors, and decreasing fleet size.

**Executive Order 13148,** "Greening the Government through Leadership in Environmental Management," April 21, 2000. This order includes requirements for Federal agencies to integrate environmental management into decision making, conduct compliance audits, emphasize pollution prevention, reduce use and releases of toxic chemicals, reduce use of ozone-depleting substances, and use environmentally sound landscaping techniques.

**Executive Order 13134,** "Developing and Promoting Biobased Products and Bioenergy," August 12, 1999. This order is designed to stimulate creation and early adoption of technologies needed to make biobased products and bioenergy cost-competitive. It establishes an Interagency Council, as well as groups within the U.S. Department of Agriculture (USDA) and DOE, to develop a strategic plan for development and use of biobased products and bioenergy.

**Executive Order 13123,** "Greening the Government through Energy-Efficient Management," June 3, 1999. This order is designed to improve energy management

in the Federal government, thereby saving taxpayer dollars and reducing emissions that contribute to air pollution and global climate change. Specific requirements include a 30% reduction of greenhouse gas emissions attributed to facility energy use by 2010 compared to 1990 levels; a 30% reduction of energy use per gross square foot by 2005 and a 35% reduction by 2010 compared to 1985 levels; use of renewable energy and support for the Million Solar Roofs Initiative; and water conservation.

**Executive Order 13101**, “Greening the Government through Waste Prevention, Recycling, and Federal Acquisition,” September 14, 1998. This order created a Steering Committee and a Federal Environmental Executive. It requires EPA to update the *Comprehensive Procurement Guideline* and publish *Recovered Materials Advisory Notices*; develop guidance on environmentally preferable purchasing; and assist agencies in conducting pilot projects using these guidelines. It requires the USDA to prepare a list of Biobased Products and encourages Federal agencies to consider purchasing these products.

**Executive Order 12902**, “Energy Efficiency and Water Conservation at Federal Facilities,” March 8, 1994. (Superseded by Executive Order 13123.) For Federal agencies this order required a 30% reduction in per-gross-square-foot energy consumption by 2005 compared to 1985, a 20% increase in energy efficiency in industrial facilities by 2005 compared to 1990, implementation of all cost-effective water conservation projects, and the procurement of products in the top 25% of their class in energy efficiency. Compliance was required only if cost-effective options were available.

**Executive Order 12873**, “Federal Acquisition, Recycling, and Waste Prevention,” October 20, 1993. (Superseded by Executive Order 13101.) This order addressed the government’s purchasing power, incorporated environmental considerations into decision making, and encouraged waste prevention and recycling in daily operations. Specific targets were not included.

**Executive Order 12856**, “Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements,” August 4, 1993. This order explains how Federal agencies are to comply with Emergency Planning and Community Right-to-Know (EPCRA) reporting requirements and offers “leadership options” for Federal agencies in meeting the goals of the Order.

**Executive Order 12845**, “Requiring Agencies to Purchase Energy-Efficient Computer Equipment,” April 21, 1993. (Superseded by Executive Order 13123.) This order required all Federal agency acquisitions of microcomputers, monitors, and printers to meet Environmental Protection Agency (EPA) ENERGY STAR® requirements for energy efficiency, including low-power standby features as defined by EPA ENERGY STAR Standards. Agencies were directed to make Federal users

aware of the economic and environmental benefits of energy-saving equipment through information and training classes.

**Executive Order 12844**, “Federal Use of Alternative Fueled Vehicles,” April 21, 1993. This order requires the Federal government to adopt aggressive plans to acquire, subject to availability of funds and considering life-cycle costs, alternative-fueled vehicles, in numbers that exceed by 50% the requirements for 1993 through 1995 set forth in the Energy Policy Act of 1992.

**Executive Order 12843**, “Procurement Requirements and Policies for Federal Agencies for Ozone-Depleting Substances,” April 21, 1993. This order requires Federal agencies to maximize the use of safe alternatives to ozone-depleting substances by: (1) revising procurement practices; (2) modifying specifications and contracts that require the use of ozone-depleting substances; (3) substituting non-ozone-depleting substances to the extent economically practicable; and (4) disseminating information on successful efforts to phase out ozone-depleting substances.

**Executive Order 12759**, “Federal Energy Management,” April 17, 1991. (Superseded by Executive Order 12902.) This order extended the FEMIA energy reduction requirements for Federal buildings to 2000, requiring a 20% reduction in per-square-foot energy usage from 1985 levels.

## Executive Memoranda

**Executive Memorandum** on “Cutting Greenhouse Gases through Energy Savings Performance Contracts,” July 25, 1998. This directs Federal agencies to make greater use of ESPCs in meeting the goals of Executive Order 12902.

**Executive Memorandum** on “Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds,” April 26, 1994. Requires Federal grounds and Federally funded projects, where cost-effective and practicable, to use regionally native plants for landscaping. It also requires facility managers to promote construction practices that minimize adverse effects on the natural habitat; minimize use of fertilizers and pesticides; use integrated pest management techniques; and recycle green waste. Water-efficient practices, such as minimizing runoff, using mulches, irrigating using efficient systems, and performing water audits, are also required. Agencies must also establish areas that demonstrate these principles.

## Code of Federal Regulations

**10 CFR 435** establishes performance standards to be used in the design of new Federal commercial and multifamily high-rise buildings. Some of the guidelines are relevant to retrofits.

## 1.3

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**10 CFR 436** establishes procedures for determining the life-cycle cost-effectiveness of energy conservation measures, and for setting priorities for energy conservation measures in retrofits of existing Federal buildings. Subpart B establishes an ESPC program to accelerate investment in cost-effective energy conservation measures in Federal buildings.

## Regulations and Guidelines

**Comprehensive Procurement Guidelines.** These guidelines describe minimum recycled content for a variety of products used in construction, offices, and other Federal activities.

**Environmentally Preferable Purchasing Guidance,** August 20, 1999. EPA guidance is based on five

principles: (1) include environmental considerations as part of the normal purchasing process; (2) emphasize pollution prevention early in the purchasing process; (3) examine multiple environmental attributes throughout a product's life cycle; (4) compare environmental impacts when selecting products; and (5) make purchasing decisions based on accurate and meaningful information about environmental performance of products and services.

## References

For more information on Federal rules and regulations relative to energy and environmental actions, contact FEMP's Help Desk at (800) DOE-EREC (363-3732), and see the FEMP Web site, [www.eren.doe.gov/femp/](http://www.eren.doe.gov/femp/).